

Title (en)
AIR CONDITIONING SYSTEM AND CONTROLLING METHOD THEREOF

Title (de)
KLIMAANLAGE UND STEUERUNGSVERFAHREN DAFÜR

Title (fr)
SYSTÈME DE CLIMATISATION ET PROCÉDÉ DE COMMANDE ASSOCIÉ

Publication
EP 3710771 B1 20240508 (EN)

Application
EP 18879884 A 20181116

Priority
• US 201762588153 P 20171117
• CA 2018051461 W 20181116

Abstract (en)
[origin: WO2019095070A1] Conditioning systems and methods for providing cooling to a heat load can include an evaporative cooler arranged in a scavenger plenum with a recovery coil downstream of the evaporative cooler. The conditioning systems can operate in various modes, including an adiabatic mode and an evaporative mode, depending on outdoor air conditions. The systems can operate in a blended mode between the adiabatic mode and the evaporative mode by varying the distribution of return water from the recovery coil into at least partially isolated sections of a storage tank, and selectively directing cold water from the evaporative cooler into the tank. The mix of warm and cold water exiting the tank can be varied to maintain the cold-water supply at or near a set point temperature for the heat load. In an example, the systems can include a pre-cooler in the plenum upstream of the evaporative cooler for pre-conditioning the scavenger air.

IPC 8 full level
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